

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number  
**WO 2005/052877 A1**

(51) International Patent Classification?: **G08B 13/24**,  
13/22

(72) Inventor; and

(75) Inventor/Applicant (for US only): **CLAESSON, Per**  
[SE/SE]; Soltuna Godegård 61, S-591 98 Motala (SE).

(21) International Application Number:

PCT/SE2004/001730

(74) Agent: **AWAPATENT AB**; Box 5117, S-200 71 Malmö  
(SE).

(22) International Filing Date:

25 November 2004 (25.11.2004)

(25) Filing Language:

Swedish

(26) Publication Language:

English

(30) Priority Data:

0303161-4 26 November 2003 (26.11.2003) SE

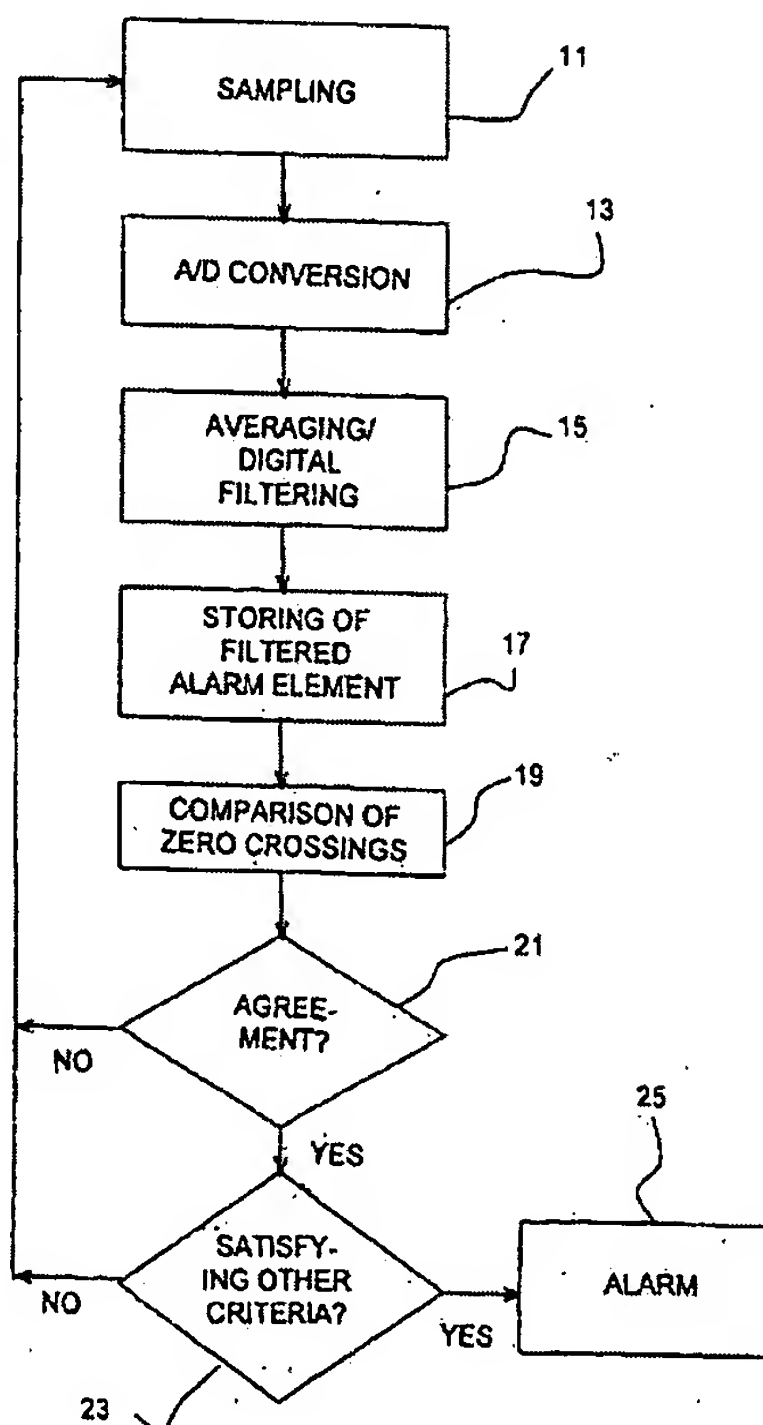
(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AB, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PI, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(71) Applicant (for all designated States except US): **GATE-  
WAY SECURITY AB** [SE/SE]; Box 346, S-591 24 Mo-  
tala (SE).

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): **ARIPO** (BW, GH,

[Continued on next page]

(54) Title: **ARTICLE SURVEILLANCE SYSTEM**



(57) Abstract: The invention relates to an electronic article surveillance system which in pulses emits an electromagnetic field, and in monitoring intervals between the pulses receives reply signals from alarm labels within the surveillance area of the system. An incoming signal is sampled (11) in the system. The zero crossings of the sampled signals are identified, and the phase positions thereof are compared (19) with corresponding phase positions of zero crossings of an incoming signal, received and sampled in a previous monitoring interval. If these phase positions agree sufficiently well, an alarm can be initiated (25).

WO 2005/052877 A1



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*